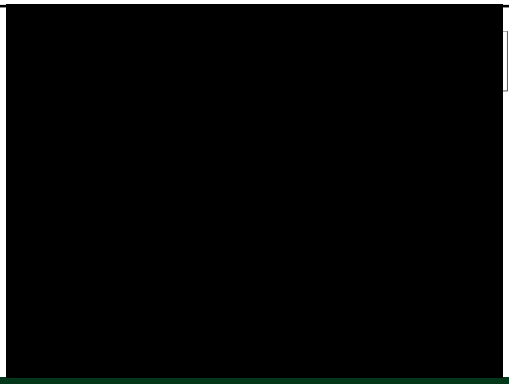
Behavioral Safety

WCF 1



WCF

Behavioral Safety

Objective: Use Behavioral Safety concepts to reduce the frequency and severity of workplace accidents, injuries and illnesses

WCF 2

Behavioral Safety

Concepts Emphasized to increase safety awareness:

- **Observation Checklists & Reports**
- **Employee involvement**
- **Positive consequences**
- **Recognition**
- **Safety Sharing**

WCF 3

Unsafe behaviors cause most injuries

WCF 5

New Ferrari for Dad
$1,000,000

WCF

WCF

Daughter borrows Dad 's new car to try out..... and hits Power Pole at 200 MPH.

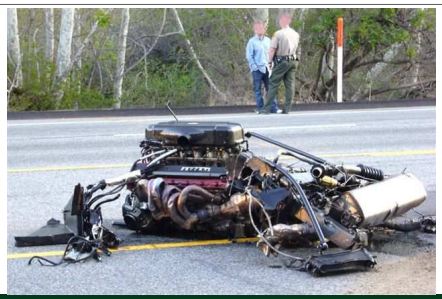
WCF

WCF

WCF

WCF

The driver only had some bruising (seat belt) and 2 small cuts.



WCF

Car loss? $1 Million bucks!
Waiting list for a new one? 2 years.

WCF

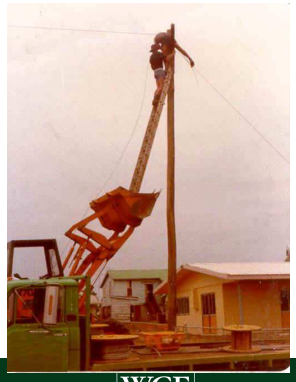
WCF

When can daughter drive Dad 's car again? Next lifetime.
When will kid not be grounded and see the light of day?
Same day the polar ice caps melt.
But she is still alive....
Priceless.....

WCF

Car only had 9 miles on it !.....
One mile of it was during the wreck.

WCF



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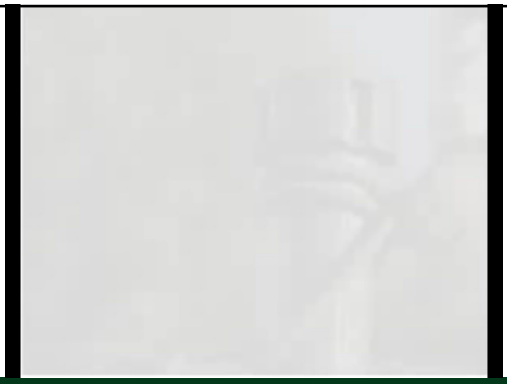
WCF 15

WCF 18

WCF 19



WCF 21

Du Pont's 10-year Study of Injuries

Body position		30%
Tools and equipment	28%	
Actions of another person		14%
Protective equipment	12%	
Procedures and housekeeping		12%
Total injuries from unsafe behavior	96%	
Total injuries from other causes		4%

WCF 4

What motivates employees to take risks?

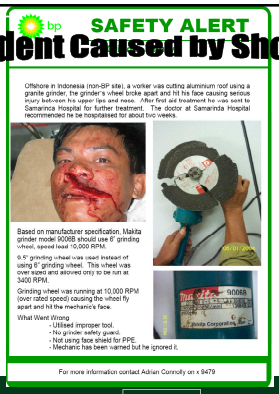
WCF 22

Unsafe behavior is rewarding

- Saves time
- Convenience
- Comfort
- Negative consequences unlikely
  - **Caution graphic pictures next 2**

WCF 23

Accident Caused by Shortcuts



WCF 6

12

METAL/NONMETAL MINE FATALITY - On May 3, 2008, a 51 year-old mine owner with 45 weeks experience was fatally injured at a surface sand and gravel operation. He was working alone, operating an excavator on the water-covered floor of the pit, attempting to clean a clogged drainage ditch. When the victim moved the excavator, one of the crawler tracks fell into an 8-foot deep sump hole that was not visible due to the high water. The excavator fell on its side, trapping him inside the cab.

Best Practices
•Examine working places, identify hazards, and assess and control risks. Be alert to changing conditions. Maintain a safe distance from the edge of excavations and slopes. If the safety of travelways cannot be positively determined, do not travel on them.
•Where hazards in travelways are not clearly distinguishable or immediately obvious, install barriers, markers, or other warning devices to aid equipment operators and limit travel of mobile equipment.
•Ensure all miners are trained to recognize workplace hazards, specifically the limited visibility inherent to the operation of large equipment.
•Wear seat belts when operating self-propelled mobile equipment.

WCF

Traditional Safety Approach to solve these problems

- **Management takes responsibility**
- **New rules and regulations are put in place**
- **Violations must be reported**
- **Disciplinary action**
- **"Big Stick" approach (force to comply)**
- **Measures success by # of accidents**
- **Will achieve some improvement**

WCF 24

•

WCF 25

Where is your emphasis?

Failures	Behaviorist's believe that it should be on Achievements
Injuries and accidents	Safety suggestions
	Use of PPE
	Safety Committee
	Good housekeeping
	Safety observations
	Employee input participation

WCF 26

Components involved in safety.

- **People** (morale, training, skills, experience, attitude, behaviors, motivation)
- **Equipment** (guarding, maintenance, age, condition)
- **Environment (**cleanliness, organized, workflow)
- **Culture** (leadership, concern for employees, atmosphere)

All of them need some emphasis

WCF 27

Many safety programs give most attention to equipment and the environment.
More focus needs to be on people and especially behaviors!

WCF 28

Do you have an incentive program?
Many...Zero Injury Safety Incentives

- Discourage reporting
- May be rewarding unsafe actions
- Focus on failure
- Reinforce that safety is punitive
- Deflate morale
- Don't correlate actions and outcome

WCF 29

The Behavioral Approach

"Behavioral safety can further reduce the occurrence of injuries as much as **50%**"

-Dr.Terry McSween
(Behavioral Expert)

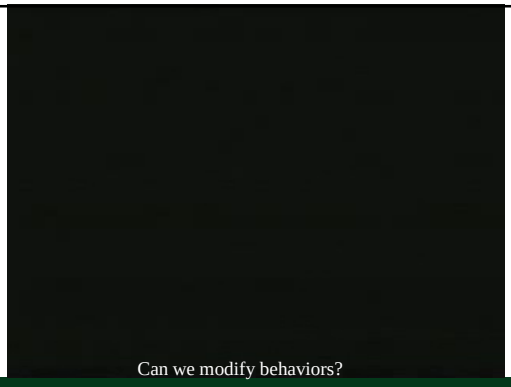
WCF 30

Behavior definition:

Behavior is an observable act.

Behavior is not personality, attitude, or intelligence, although these may affect behavior.

WCF 31



Can we modify behaviors?

WCF 32

What influences our behavior?

- **Employee Ability**
  - **Knowledge**
  - **Skill**
- **Corporate Culture**
  - **Training**
  - **Procedures**
  - **Rules**
  - **Reinforcement**
- **Employee Attitude**
  - **Personal beliefs**
  - **Feelings**
  - **Habits**

WCF 33

You may be Surprised?

Rules

Discipline

Training

Direct, but do not *motivate* behavior.

WCF 34

Consequences motivate behavior!

Soon
Certain
Positive

WCF 35

- "Staying safe doesn't feel like an accomplishment." Scott Geller"
- Most feel it won't happen to them.
  - More experience brings short cuts
  - Convenient bad habits continue because a person will rarely have an injury.
- So what can we do?
- We take advantage of consequences!

WCF 36

Consequence Structure

- Positive
  - We get wanted results
  - We avoid unwanted results
- Negative
  - We get unwanted results
  - We don't get wanted results

Actions are the result

WCF 38

Behavior Cycle

Precursor (Cues or signals to do something)

Behavior (What we can see someone do)

Consequence (What we get from what we do)

WCF 60

WCF

Scott Geller Suggests:

- That we actively care about safety.
- We should be "Looking out for the safety of others as well as ourselves. Even if we don't know them."
- Give positive reinforcement for the desired behaviors.

WCF 40

What are positive reinforcements?

- Thank you.
- Recognition in any form.
- Small incentive award.
  - Gift card
  - Company mug

WCF

- "Safety is not just a matter of following rules.
- When rules are the main emphasis people feel controlled.
  - People will act to assert their freedom.
  - They want to feel in control". Scott Geller

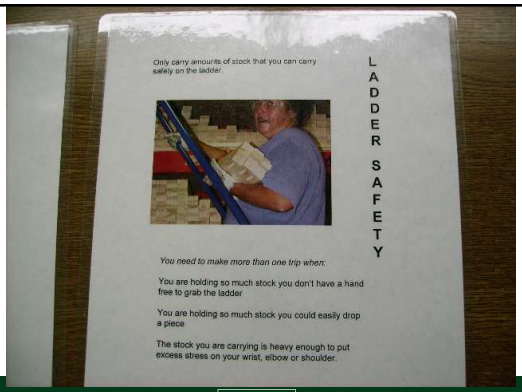
WCF 41

- When they are involved they feel in control.
  - They will work even harder to make it successful.

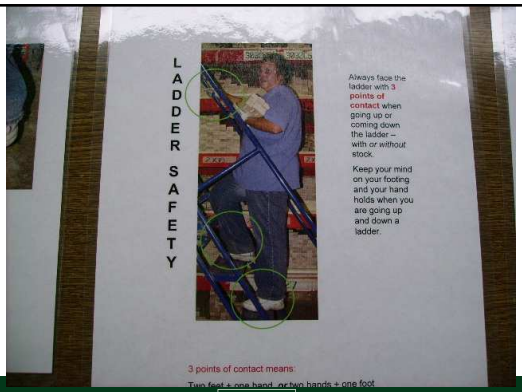
WCF 42

Cabinetry by Karman

WCF 43



WCF 44



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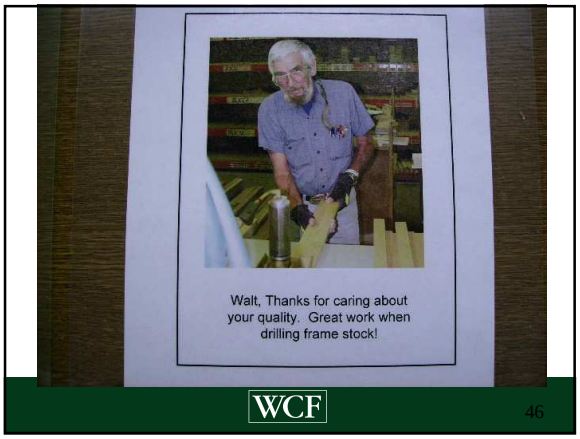

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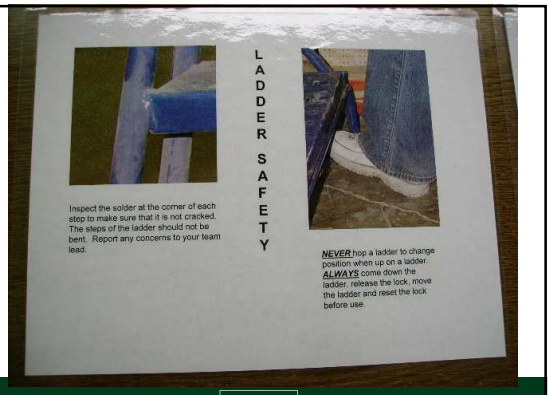

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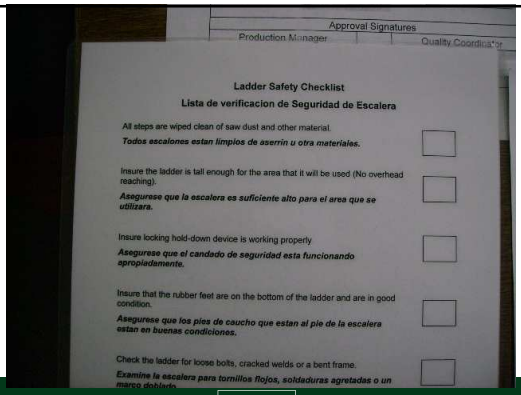

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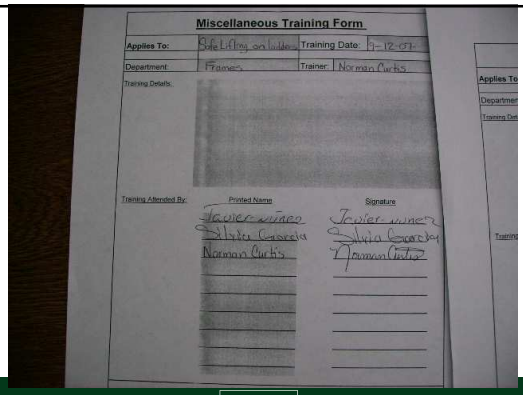

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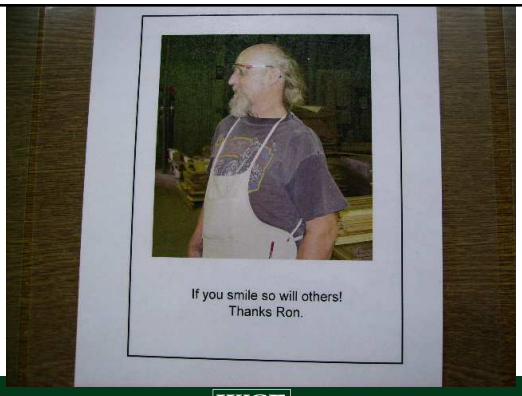
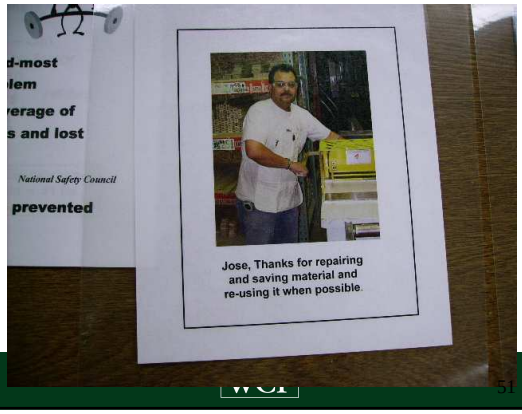


WCF 50



51

WCF 52

WCF 53

<u>You</u>
can help employees realize their safety successes!

WCF 54

"Most employees would rather work to achieve success than work to avoid failure."

-Dr. Scott Geller

WCF 55

WCF 56

What brings about a negative outcome?…

- If we don't evaluate the processes we can't correct discrepancies
- Process discrepancies create compromise
- Compromise creates process breakdowns
- Process breakdowns create unintended outcomes (Incidents)

WCF 57

WCF 58

Areas with potential for improvement

- **People** (morale, training, skills, experience, attitude, behaviors, motivation) ➡ **Educate**
- **Equipment** (guarding, maintenance, age, condition) ➡ **Engineer**
- **Culture** (leadership, concern for employees, atmosphere) ➡ **Consequences**

WCF 59

In a Traditional Safety Structure:

- **Hazards are identified and corrected**
- **Emphasis is on fixing problems**
- **Managers and Supervisors take most of the responsibility for defining the "safe" environment and maintaining it**
- **Rules outline what is acceptable**
- **People follow rules because they are forced to**

WCF 62

Traditional + Behavioral Safety = positive safety culture

When you combine a traditional safety program with a behavioral safety process you build a positive safety culture

WCF 63

A Behavioral Safety Process is set up so that:

- Everyone participates in defining safe work practices and determining those that are most critical.
- Performance is measured through peer to peer observation and is tracked over time.
- Performance is achieved through feedback.

WCF 64

A Behavioral Safety Process :

- Focuses on utilizing systems that support high performance
- Creates a culture where people work safely because they *want* to and because their co-workers want them to
- People develop *habits* that do not put them at risk
- Is continually improving
- Will create a continuous desire within the people to achieve higher level of safety.

WCF 65

In Behavioral Safety…

- Safety serves as the driving principle for everyone
- Everyone takes responsibility for their own safety and the safety of others
- Achievements are recognized and celebrated often
- Success is measured by looking at safety and production.

WCF 66

JSA (Job Hazard Analysis)

Job Hazard Analysis	Job Title	Date	
	Title of Person who does Job:	Supervisor John Doe	Analysis By:
Company/Organization	Plant/Location:	Department	Reviewed By:
Required and/or Recommended Personal Protective Equipment:			Approved By:

Sequence of Basic Job Steps	Potential Hazards	Recommended Action or Procedure

WCF 67

Thank employees for being safe...

WCF 68

Take time to recognize them for their achievements!

WCF 69

Readiness for Behavioral Safety

- Management support
- Ready to try new ideas
- A trusting work environment/culture
- Open communication exists
- Willingness to take necessary time for training
- Genuine concern for the safety of employees

WCF 70

Critical Behavior Checklist
Behavioral Safety

Company Name:		Area observed:	
Department:			
Approval Date:			
Assigned Observer(s):			
Environment (Conditions, Equipment)		Behaviors (Actions)	
Needs Improvement	Meets Requirements	At Risk/Unsafe	Safe

WCF 71

Observation Report
Behavioral Safety

Company Name:	Area observed:
Department:	Date:
Observer:	

Environment (Conditions, Equipment)		Behaviors (Actions)	
Needs Improvement	Meets Requirements	At Risk/Unsafe	Safe
____	____	____	____
____	____	____	____
____	____	____	____
____	____	____	____
____	____	____	____
# of NI Observations ____	# of MR Observations ____	# of ARU Observations ____	# of S Observations ____
Total Environment Observations (NI + MR) ____		Total Behaviors Observations (ARU + S) ____	
Meets Requirements % [(MR/TEO) X 100] ____%		Safe Behaviors % [(S/TBO) X 100] ____%	
Needs Improvement % [(NI/TEO) X 100] ____%		At Risk Behaviors % [(ARU/TBO) X 100] ____%	
Comments:		Comments:	

WCF 72

Critical Behavior Checklist

- What types of accidents are the most frequent?
- What types of accidents are the most severe?
- What conditions contributed?
- What behaviors contributed?
- What changes will be made?

WCF 73

Establish company goals and

Involve employees in goal setting!!!

Many companies do not even have goals related to safety.

WCF 74

Coaching and Feedback are important, but let them Take responsibility.

WCF 75

WCF 76

"People don't care how much you know until they know how much you care".

WCF 77

Safety Share*

- Moderator starts meeting describing what he/she did safely.
- Employees take turns and "share" what they did safely since the last meeting.
- Provide a simple recognition item (candy or whatever the budget allows).
- Thank employees for their safe behaviors.
- Ask the group what they learned.
- Ask the group how they can be more safe in the future.

*Adapted from "Working Safe" by E. Scott Geller

WCF 78

Safety Share*

- Benefits
  - Safety is seen as an achievement
  - All can participate
  - Everyone learns from each other
  - Safe behaviors are encouraged and reinforced
  - Little planning time needed to have a very effective safety meeting
  - This safety approach will be remembered by employees

*Adapted from "Working Safe" by E. Scott Geller

WCF 79

Where to Start?

- ✶ Identify values
- ✸ Conduct a safety assessment
- ✹ Present a behavioral safety workshop for management
- ❋ Put together a "design team"
- ⌖ Create the safety observation process
- ⌖ Develop feedback and involvement procedures
- ✧ Establish safety incentives
- ⌑ Hold training and kickoff meetings
- ⌔ Implement behavioral safety process
- ✪ Maintain the momentum and evaluate the progress

WCF 81

Resources

- "Working Safe"(Geller)
- "The Values-Based Safety Process" (McSween)
- "Current Issues In Behavior-Based Safety" (Krause)
- J.J. Keller
- "Behavioral Safety Now" conferences
- Various "Professional Safety" articles

WCF 82